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4. The protection method as claimed in claim 1, wherein the discharge control switch is released from the forced OFF state when any of the battery cells is in an overcharged state.

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5. The protection method as claimed in claim 1, wherein the discharge control switch is released from the forced OFF state when the voltage of any of the battery cells reaches a predetermined voltage value.

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6. A control circuit which is controlled in accordance with the voltage of each of battery cells by a monitor circuit monitoring over-discharge of the battery cells, and which controls a discharge control switch disposed between a load and the battery cells,

said control circuit comprising a forced OFF unit which forces the discharge control switch into a forced OFF state, regardless of a monitoring result of the monitor circuit.

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13. A control circuit which is controlled in accordance with the voltage of each of battery cells by a monitor circuit monitoring over-discharge of the battery cells, and which controls a discharge control switch disposed between a load and the battery cells,

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said control circuit comprising a forced OFF unit which forces the discharge control switch into a forced OFF state in accordance with a forced OFF signal supplied from outside.

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10 claim ¹³~~7~~, ¹⁴~~8~~. The control circuit as claimed in further comprising a release unit which releases the discharge control switch from the forced OFF state in accordance with a release signal supplied from outside.

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20 ⁷~~9~~. The control circuit as claimed in claim 6, further comprising:
a detecting unit which detects whether the battery cells are being charged or not; and
a release unit which releases the discharge control switch from the forced OFF state when the battery cells are being charged.

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30 claim ¹³~~7~~, ¹⁵~~10~~. The control circuit as claimed in further comprising:
a detecting unit which detects whether the battery cells are being charged or not; and
a release unit which releases the discharge control switch from the forced OFF state
35 when the battery cells are being charged.

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11. The control circuit as claimed in
claim 7, wherein the discharge control switch is
controlled by the monitor circuit when released from
the forced OFF state by the release unit.

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12. The control circuit as claimed in
claim 10, wherein the discharge control switch is
controlled by the monitor circuit when released from
the forced OFF state by the release unit.

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13. The control circuit as claimed in
claim 6, further comprising:
a detecting unit which detects whether the
battery cells are in an overcharged state or not;
and

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a release unit which releases the
discharge control switch from the forced OFF state
when any of the battery cells is in an overcharged
state.

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14. The control circuit as claimed in
claim 7, further comprising:
a detecting unit which detects whether the
battery cells are in an overcharged state or not;
and

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a release unit which releases the
discharge control switch from the forced OFF state
when any of the battery cells is in an overcharged

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state.

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^{10.}
9 ~~15.~~ The control circuit as claimed in
claim ~~13~~, wherein the discharge control switch is
controlled by the monitor circuit when released from
the forced OFF state by the release unit.

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17 ~~16.~~ The control circuit as claimed in
claim ~~14~~, wherein the discharge control switch is
controlled by the monitor circuit when released from
the forced OFF state by the release unit.

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~~17.~~ The control circuit as claimed in
claim 6, further comprising a release unit which
releases the discharge control switch from the
forced OFF state when the voltage of any of the
battery cells reaches a predetermined voltage value.

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^{19.}
13 ~~18.~~ The control circuit as claimed in
claim ~~7~~, further comprising a release unit which
releases the discharge control switch from the
forced OFF state when the voltage of any of the
battery cells reaches a predetermined voltage value.

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12.
11 19. The control circuit as claimed in
claim 17, wherein the predetermined voltage value
can be set at a desired value.

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19 20. The control circuit as claimed in
claim 18, wherein the predetermined voltage value
10 can be set at a desired value.

15 21. A battery unit for supplying power to
a load, comprising:

battery cells;

a monitor circuit which monitors an over-
discharged state of the battery cells;

20 a discharge control switch which is
controlled by the monitor circuit, and is disposed
between the load and the battery cells; and

a forced OFF unit which forces the
discharge control switch into a forced OFF state,
25 regardless of a monitoring result of the monitor
circuit.

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28.
22. A battery unit for supplying power to
a load, comprising:

battery cells;

35 a monitor circuit which monitors an over-
discharged state of the battery cells;

a discharge control switch which is
controlled by the monitor circuit, and is disposed

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~~22~~ ²⁶ The battery unit as claimed in claim
~~24~~, wherein the discharge control unit is controlled
by the monitor circuit when released from the forced
OFF state by the release unit.

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³⁰ ~~25~~ ²⁷ The battery unit as claimed in claim
10 ~~25~~, wherein the discharge control unit is controlled
by the monitor circuit when released from the forced
OFF state by the release unit.

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~~28~~ The battery unit as claimed in claim
21, further comprising:
a detecting unit which detects whether the
20 battery cells are in an over-discharged state when
the discharge control switch is held in the forced
OFF state by the forced OFF unit; and
a release unit which releases the
discharge control switch from the forced OFF state
25 when the battery cells are in an overcharged state.

³²
30 ~~28~~ ²⁹ The battery unit as claimed in claim
~~22~~, further comprising:

a detecting unit which detects whether the
battery cells are in an overcharged state when the
discharge control switch is held in the forced OFF
35 state by the forced OFF unit; and
a release unit which releases the
discharge control switch from the forced OFF state

when the battery cells are in an overcharged state.

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^{25.}
~~24.~~_{28.} The battery unit as claimed in claim
wherein the discharge control switch is
controlled by the monitor circuit when released from
the forced OFF state by the release unit.

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^{33.}
^{32.}~~29.~~_{31.} The battery unit as claimed in claim
wherein the discharge control switch is
controlled by the monitor circuit when released from
the forced OFF state by the release unit.

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^{26.}
^{22.}~~22.~~ The battery unit as claimed in claim
21, further comprising a release unit which releases
the discharge control switch from the forced OFF
state when the voltage of any of the battery cells
reaches a predetermined voltage value.

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^{34.}
^{28.}~~22.~~_{33.} The battery unit as claimed in claim
further comprising a release unit which releases
the discharge control switch from the forced OFF
state when the voltage of any of the battery cells
reaches a predetermined voltage value.

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~~34~~ 34. The battery unit as claimed in claim
~~32~~, wherein the predetermined voltage value can be
set at a desired value.

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~~35~~ 35. The battery unit as claimed in claim
set at a desired value.

15 36. A control circuit in a protection
circuit for a device having a discharge control
switch which controls discharge and is situated
between a load and battery cells supplying power to
the load,

20 said control circuit comprising:
a monitor circuit which judges whether any
of the battery cells is in an over-discharged state
or not from voltages inputted from the battery cells,
and which switches off the discharge control switch
25 when any of the battery cells is in an over-
discharged state; and

a forced OFF unit which forces the
discharge control switch into a forced OFF state in
accordance with a signal supplied from outside.

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